



the cell surface. The Fas ligand-induced DNA laddering could be blocked by adding 10  $\mu$ g/ml of a soluble blocking monoclonal antibody directed against Fas. This same.

DETDESC:  
DETD(183)

Jurkat. . . 37 degree. C., after which wells were aspirated and washed twice with PBS to remove unbound antibody. Jurkat cells treated with Fas ligand or M3, a blocking monoclonal antibody directed against Fas, (Anderson et al., J. Exp. Med. 181:71, 1995, and PCT application.

DETDESC:  
DETD(187)

Fas ligand demonstrated the ability to kill Jurkat cells. The anti-Fas antibody M3 inhibited the activity of Fas ligand, but not the activity of TRAIL.

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(FILE USPAT ENTERED AT 15:02:01 ON 25 MAR 1999)

E GOODWIN, RAYMOND/N

L1 23 S E1 OR E3 OR E4  
L2 28 S FAS(W)LGAND  
L3 1 S L1 AND L2  
=> d 12 1-28 leg ab

US PAT NO: 5,885,827 [IMAGE AVAILABLE] L2: 1 of 28

DATE ISSUED: Mar. 23, 1999

TITLE: Eukaryotic high rate mutagenesis system

INVENTOR: Matthias Wael, San Francisco, CA

Jürgen Bachl, San Francisco, CA

ASSIGNEE: The Regents of the University of California, Oakland, CA (U.S. corp.)

APPL-NO: 08/889,112

DATE FILED: Jan. 23, 1998

ART-UNIT: 186

PRIM-EXMR: James Keiter

ASST-EXMR: Iren Yurecl

LEGAL-REP: Cooley Godward LLP

US PAT NO: 5,885,827 [IMAGE AVAILABLE] L2: 1 of 28

STRCT:

Method is provided for performing saturation mutagenesis on a target gene by exploiting the immunoglobulin hypermutation system. A target gene is cloned into an expression vector containing immunoglobulin enhancer fragments that effect hypermutation, and this construct is then transacted into an immunoglobulin mutator cell, typically of pre-B lymphocyte lineage. The target gene is permitted to hypermutate at a rate approaching that of 10 sup-4 /bp/generation as the cells are cultured to a desired density. The variant polypeptides encoded by the hypermutated target gene can then be selected.

US PAT NO: 5,877,285 [IMAGE AVAILABLE] L2: 2 of 28

DATE ISSUED: Mar. 2, 1999

TITLE: Mammalian thymokine having leukocyte chemotactic activity, and fragments thereof

INVENTOR: Gregory S. Keiner, Cupertino, CA

Jacqueline L. Kennedy, Sunnyvale, CA

ASSIGNEE: Schering Corporation, Kenilworth, NJ (U.S. corp.)

APPL-NO: 08/472,804

DATE FILED: Jun. 7, 1995

ART-UNIT: 186

PRIM-EXMR: Lorraine Spector

LEGAL-REP: Kenneth A. Weber, Edwin P. Ching

US PAT NO: 5,877,285 [IMAGE AVAILABLE] L2: 2 of 28

ABSTRACT:

Nucleic acids encoding a thymokine from a mammal, reagents related thereto, including specific antibodies, and purified proteins are described. Methods of using said reagents and related diagnostic kits are also provided.

US PAT NO: 5,876,939 [IMAGE AVAILABLE] L2: 3 of 28

DATE ISSUED: Mar. 2, 1999

TITLE: FAS associated proteins

INVENTOR: John C. Reed, Carlsbad, CA

Takaaki Sato, San Diego, CA

ASSIGNEE: La Jolla Cancer Research Foundation, La Jolla, CA (U.S. corp.)

APPL-NO: 08/858,311

DATE FILED: May 19, 1997

ART-UNIT: 164

PRIM-EXMR: Kenneth R. Horlick

LEGAL-REP: Campbell & Flores LLP

US PAT NO: 5,876,939 [IMAGE AVAILABLE] L2: 3 of 28

ABSTRACT:

The present invention provides mammalian protein tyrosine phosphatases, human PTP-BAS type 4, human PTP-BAS type 5a and mouse PTP-BAS type 5b.

each of which is a Fas-associated protein (FAP), nucleic acid molecules encoding a PTP-BAS type 4 or a PTP-BAS type 5 and antibodies specific for a PTP-BAS type 4 or for a PTP-BAS type 5. The invention also provides methods for identifying FAPs, which can associate with Fas and can modulate apoptosis. The invention also provides screening assays for identifying an agent that can effectively alter the association of a FAP with Fas and therefore, can increase or decrease the level of apoptosis in a cell. The invention further provides methods of modulating apoptosis in a cell by introducing into the cell a nucleic acid molecule encoding a PTP-BAS or fragment of a PTP-BAS or an antisense nucleotide sequence, which is complementary to a portion of a nucleic acid molecule encoding a PTP-BAS. The invention also provides a method of using a reagent that can specifically bind to a FAP to diagnose a pathology that is characterized by an increased or decreased level of apoptosis in a cell. The invention also provides methods of modulating apoptosis in a cell by contacting the cell with an agent that effectively alters the association of a FAP and Fas in a cell or alters the activity of a FAP in a cell.

US PAT NO: 5,858,980 [IMAGE AVAILABLE] L2: 4 of 28

DATE ISSUED: Jan. 12, 1999

TITLE: Fas ligand compositions for treatment of proliferative disorders

INVENTOR: Kenneth Walsh, Carlisle, MA

ASSIGNEE: St. Elizabeth's Medical Center, Boston, MA (U.S. corp.)

APPL-NO: 08/610,453

DATE FILED: Mar. 4, 1997

ART-UNIT: 185

PRIM-EXMR: George C. Elliott

ASST-EXMR: Sean McGarry

LEGAL-REP: Wolf, Greenfield & Sacks, P.C.

US PAT NO: 5,858,980 [IMAGE AVAILABLE] L2: 4 of 28

ABSTRACT:

A method for treating vascular injury, particularly vascular injury resulting from restenosis following angioplasty, and vascular remodeling is provided. The method involves administering to subjects in need of such treatment an effective amount of a Fas ligand molecule.

US PAT NO: 5,854,043 [IMAGE AVAILABLE] L2: 5 of 28

DATE ISSUED: Dec. 29, 1998

TITLE: MEKK-related signal transduction kinases

INVENTOR: Gary L. Johnson, Boulder, CO

ASSIGNEE: National Jewish Center for Immunology and Respiratory Medicine, Denver, CO (U.S. corp.)

APPL-NO: 08/323,460

DATE FILED: Oct. 14, 1994

ART-UNIT: 166

PRIM-EXMR: Sally P. Teng

LEGAL-REP: Giulio A. DeConti, Jr., Catherine J. Kara

US PAT NO: 5,854,043 [IMAGE AVAILABLE] L2: 5 of 28

ABSTRACT:

The present invention relates to isolated MEKK proteins, nucleic acid molecules having sequences that encode such proteins, and antibodies raised against such proteins. The present invention also includes methods to use such proteins to regulate signal transduction in a cell. The present invention also includes therapeutic compositions comprising such proteins or nucleic acid molecules that encode such proteins and their use to treat animals having medical disorders including cancer, inflammation, neurological disorders, autoimmune diseases, allergic reactions, and hormone-related diseases. When MEKK is expressed, it phosphorylates and activates MEKs including MEK-1, MEK-2 and JEK.

US PAT NO: 5,851,806 [IMAGE AVAILABLE] L2: 6 of 28

DATE ISSUED: Dec. 22, 1998

TITLE: Complementary adenoviral systems and cell lines

INVENTOR: Imre Kovacs, Rockville, MD

Douglas E. Brough, Olney, MD

Duncan L. McVey, Derwood, MD

Joseph T. Bruder, Gaithersburg, MD

ASSIGNEE: GenVec, Inc., Rockville, MD (U.S. corp.)

APPL-NO: 08/572,128

DATE FILED: Dec. 14, 1995

ART-UNIT: 185

PRIM-EXMR: David Guzo

ASST-EXMR: William Sandeis

LEGAL-REP: Leydig, Voit & Meyer, Ltd.

US PAT NO: 5,851,806 [IMAGE AVAILABLE] L2: 6 of 28

ABSTRACT:

The present invention provides multiply replication deficient adenoviral vectors having a spacer in at least one replication deficient adenoviral region, as well as complementing cell lines therefor. Also provided are means of constructing the multiply replication deficient adenoviral vectors and methods of use thereof, e.g., in gene therapy.

US PAT NO: 5,851,782 [IMAGE AVAILABLE] L2: 7 of 28

DATE ISSUED: Dec. 22, 1998

TITLE: Inhibitors of ceramidase

INVENTOR: Yusuf A. Hannun, Chapel Hill, NC

Alicja Bielawska, Apex, NC

ASSIGNEE: Duke University, Durham, NC (U.S. corp.)

APPL-NO: 08/745,128

DATE FILED: Nov. 8, 1996

ART-UNIT: 161

PRIM-EXMR: Richard L. Raymond

LEGAL-REP: Nixon & Vandehy P.C.

US PAT NO: 5,851,782 [IMAGE AVAILABLE] L2: 7 of 28

ABSTRACT:

The present invention relates, in general, to the bioeffector molecule ceramide and, in particular, to methods of effecting intracellular accumulation of ceramide. The invention further relates to methods of selecting compounds that inhibit alkaline ceramidase and that can be used to treat diseases/disorders associated with cell hyperplasia or dedifferentiation.

US PAT NO: 5,830,916 [IMAGE AVAILABLE] L2: 8 of 28

DATE ISSUED: Nov. 3, 1998

TITLE: Inhibitor of ceramidase

INVENTOR: Yusuf A. Hannun, Chapel Hill, NC

Alicja Bielawska, Apex, NC

ASSIGNEE: Duke University, Durham, NC (U.S. corp.)

APPL-NO: 08/652,238

DATE FILED: May 23, 1996  
ART-UNIT: 129  
PRIM-EXMR: Richard L. Raymond  
LEGAL-REP: Nixon & Vandervhye P.C.

US PAT NO: 5,830,916 [IMAGE AVAILABLE] L2: 8 of 28

**ABSTRACT:**

The present invention relates, in general, to the bioeffector molecule ceramide and, in particular, to methods of effecting intracellular accumulation of ceramide. The invention further relates to methods of selecting compounds that inhibit alkaline ceramidase and that can be used to treat diseases/disorders associated with cell hyperplasia or dedifferentiation.

US PAT NO: 5,830,469 [IMAGE AVAILABLE] L2: 9 of 28

DATE ISSUED: Nov. 3, 1998  
TITLE: Fas antagonists and uses thereof  
INVENTOR: David H. Lynch, Bainbridge Island, WA  
Mark R. Alderson, Bainbridge Island, WA  
ASSIGNEE: Immunex Corporation, Seattle, WA (U.S. corp.)  
APPL-NO: 08/429,489  
DATE FILED: Apr. 26, 1995  
ART-UNIT: 182  
PRIM-EXMR: Susan A. Loting  
LEGAL-REP: Kathryn A. Anderson

US PAT NO: 5,830,469 [IMAGE AVAILABLE] L2: 9 of 28

**ABSTRACT:**

The present invention provides a panel of monoclonal antibodies and binding proteins which specifically bind to human Fas antigen. Some of the antibodies and binding proteins are capable of stimulating T cell proliferation, inhibiting binding of anti-Fas CH-11 monoclonal antibody to cells expressing Fas antigen, blocking anti-Fas CH-11 monoclonal antibody-mediated lysis of cells, and blocking Fas ligand-mediated lysis of cells. The invention also provides for therapeutic compositions comprising the monoclonal antibodies.

US PAT NO: 5,830,463 [IMAGE AVAILABLE] L2: 10 of 28

DATE ISSUED: Nov. 3, 1998  
TITLE: Yeast-based delivery vehicles  
INVENTOR: Richard C. Duke, Denver, CO  
Alex Franzusoff, Boulder, CO  
Donald Belgau, Denver, CO  
ASSIGNEE: University Technology Corporation, Boulder, CO (U.S. corp.)  
APPL-NO: 08/340,185  
DATE FILED: Nov. 15, 1994  
ART-UNIT: 182  
PRIM-EXMR: Jasmine C. Chambers  
ASST-EXMR: Karen M. Hauda  
LEGAL-REP: Sheridan Ross P.C.

US PAT NO: 5,830,463 [IMAGE AVAILABLE] L2: 10 of 28

**ABSTRACT:**

The present invention includes yeast vehicles and their use as delivery vehicles. Yeast vehicles include a yeast portion and a heterologous compound. Such yeast vehicles can be used to protect animals from disease and to otherwise carry compounds to given cell types. Examples of yeast vehicles include gene delivery vehicles, drug delivery vehicles, and immunomodulatory vehicles. Immunomodulatory vehicles are capable of modulating an immune response. When stimulating an immune response, such yeast vehicles effect cell-mediated as well as humoral immunity.

US PAT NO: 5,786,210 [IMAGE AVAILABLE] L2: 11 of 28

DATE ISSUED: Jul. 28, 1998  
TITLE: Mammalian thymidine genes  
INVENTOR: Gregory S. Keiner, Cupertino, CA  
Jacqueline L. Kennedy, Sunnyvale, CA  
Albert Zlotnik, Palo Alto, CA  
ASSIGNEE: Schering Corporation, Kenilworth, NJ (U.S. corp.)  
APPL-NO: 08/329,704

DATE FILED: Oct. 25, 1994

ART-UNIT: 182  
PRIM-EXMR: Stephen Walsh  
ASST-EXMR: Lorraine Spector  
LEGAL-REP: Jonathan A. Quine, Kenneth A. Weber, Edwin P. Ching

US PAT NO: 5,786,210 [IMAGE AVAILABLE] L2: 11 of 28

**ABSTRACT:**

Nucleic acids encoding a thymidine from a mammal, reagents related thereto, including specific antibodies, and purified proteins are described. Methods of using said reagents and related diagnostic kits are also provided.

US PAT NO: 5,770,690 [IMAGE AVAILABLE] L2: 12 of 28

DATE ISSUED: Jun. 23, 1998  
TITLE: Bax omega protein and methods  
INVENTOR: Catherine Mastroi Biler, Menlo Park, CA  
Stephen Scott Bowersox, Menlo Park, CA  
Roberto Crea, San Mateo, CA  
Susan Dunham Dero, San Francisco, CA  
William A. Home, San Diego, CA  
Mei Zhou, Palo Alto, CA  
ASSIGNEE: Neurex Corporation, Menlo Park, CA (U.S. corp.)  
APPL-NO: 08/616,732  
DATE FILED: Mar. 15, 1998  
ART-UNIT: 185  
PRIM-EXMR: James Kether  
ASST-EXMR: Irem Yucel  
LEGAL-REP: Charles K. Stoltz, Peter J. Dellinger.

US PAT NO: 5,770,690 [IMAGE AVAILABLE] L2: 12 of 28

**ABSTRACT:**

Bax-omega, polynucleotides and polypeptides, and compositions effective to hybridize to Bax-omega, polynucleotides are disclosed. Also disclosed are methods for altering apoptosis in cells, for promoting cell survival and for identifying compounds capable of affecting the binding of Bax-omega, to other proteins involved in apoptosis.

US PAT NO: 5,770,383 [IMAGE AVAILABLE] L2: 13 of 28

DATE ISSUED: Jun. 23, 1998  
TITLE: Tretinoid retinoids, methods for their production and use  
INVENTOR: Chan Kou Hwang, Boulder, CO  
Steven K. White, San Diego, CA  
Youssef L. Berrani, La Jolla, CA  
Stacie S. Canan Koch, San Diego, CA  
Beth Ann Badea, San Diego, CA  
Jonathan J. Hebert, Mission Viejo, CA  
Luc J. Farmer, La Jolla, CA  
Alex M. Nadzan, San Diego, CA  
ASSIGNEE: Ligand Pharmaceuticals, Inc., San Diego, CA (U.S. corp.)  
APPL-NO: 08/475,397  
DATE FILED: Jun. 7, 1995  
ART-UNIT: 188  
PRIM-EXMR: Ponnathapura Achutamurthy  
LEGAL-REP: William L. Respess, J. Scott Elmer

US PAT NO: 5,770,383 [IMAGE AVAILABLE] L2: 13 of 28

**ABSTRACT:**

Tretinoid retinoids having activity for retinoic acid receptors and/or retinoid X receptors are provided. Also provided are pharmaceutical compositions incorporating such tretinoid retinoid compounds and methods for their therapeutic use.

US PAT NO: 5,770,382 [IMAGE AVAILABLE] L2: 14 of 28

DATE ISSUED: Jun. 23, 1998  
TITLE: Tretinoid retinoids, methods for their production and use  
INVENTOR: Chan Kou Hwang, Boulder, CO  
Steven K. White, San Diego, CA  
Beth Ann Badea, San Diego, CA  
Alex M. Nadzan, San Diego, CA  
ASSIGNEE: Ligand Pharmaceuticals, Inc., San Diego, CA (U.S. corp.)

APPL-NO: 08/475,514  
DATE FILED: Jun. 7, 1995

ART-UNIT: 188  
PRIM-EXMR: Ponnathapura Achutamurthy  
LEGAL-REP: William L. Respess, J. Scott Elmer

US PAT NO: 5,770,382 [IMAGE AVAILABLE] L2: 14 of 28

**ABSTRACT:**

Tretinoid retinoids having activity for retinoic acid receptors and/or retinoid X receptors are provided. Also provided are pharmaceutical compositions incorporating such tretinoid retinoid compounds and methods for their therapeutic use.

US PAT NO: 5,770,378 [IMAGE AVAILABLE] L2: 15 of 28

DATE ISSUED: Jun. 23, 1998  
TITLE: Tretinoid retinoids, methods for their production and use  
INVENTOR: Chan Kou Hwang, Boulder, CO  
Steven K. White, San Diego, CA  
Youssef L. Berrani, La Jolla, CA  
Stacie S. Canan Koch, San Diego, CA  
Beth Ann Badea, San Diego, CA  
Jonathan J. Hebert, Mission Viejo, CA  
Alex M. Nadzan, San Diego, CA  
ASSIGNEE: Ligand Pharmaceuticals, Inc., San Diego, CA (U.S. corp.)  
APPL-NO: 08/472,127  
DATE FILED: Jun. 7, 1995  
ART-UNIT: 188  
PRIM-EXMR: Ponnathapura Achutamurthy  
LEGAL-REP: William L. Respess, J. Scott Elmer

US PAT NO: 5,770,378 [IMAGE AVAILABLE] L2: 15 of 28

**ABSTRACT:**

Tretinoid retinoids having activity for retinoic acid receptors and/or retinoid X receptors are provided. Also provided are pharmaceutical compositions incorporating such tretinoid retinoid compounds and methods for their therapeutic use.

US PAT NO: 5,763,223 [IMAGE AVAILABLE] L2: 16 of 28

DATE ISSUED: Jun. 9, 1998  
TITLE: DNA encoding a cytokine that induces apoptosis  
INVENTOR: Steven R. Wiley, Seattle, WA  
Raymond G. Goodwin, Seattle, WA  
ASSIGNEE: Immunex Corporation, Seattle, WA (U.S. corp.)  
APPL-NO: 08/670,354  
DATE FILED: Jun. 25, 1998  
ART-UNIT: 182  
PRIM-EXMR: John Ujm  
ASST-EXMR: Prema Meitz  
LEGAL-REP: Kathryn A. Anderson

US PAT NO: 5,763,223 [IMAGE AVAILABLE] L2: 16 of 28

**ABSTRACT:**

A novel cytokine designated TRAIL induces apoptosis of certain target cells, including cancer cells and virally infected cells. Isolated DNA sequences encoding TRAIL are disclosed, along with expression vectors and transformed host cells useful in producing TRAIL polypeptides. Antibodies that specifically bind TRAIL are provided as well.

US PAT NO: 5,763,220 [IMAGE AVAILABLE] L2: 17 of 28

DATE ISSUED: Jun. 9, 1998  
TITLE: Human apoptosis-related calcium-binding protein  
INVENTOR: Jennifer L. Hillman, San Jose, CA  
Surya K. Goli, Sunnyvale, CA  
ASSIGNEE: Inocyte Pharmaceuticals, Inc., Palo Alto, CA (U.S. corp.)  
APPL-NO: 08/766,605  
DATE FILED: Dec. 12, 1996  
ART-UNIT: 184  
PRIM-EXMR: Robert A. Wax  
ASST-EXMR: Garbrielle E. Bugaitsky  
LEGAL-REP: Lucy J. Billings

US PAT NO: 5,763,220 [IMAGE AVAILABLE] L2: 17 of 28

ABSTRACT:

The present invention provides a human apoptosis-related calcium-binding protein (HARC) and polynucleotides which identify and encode HARC. The invention also provides genetically engineered expression vectors and host cells comprising the nucleic acid sequences encoding HARC and a method for producing HARC. The invention also provides for agonists, antibodies, or antagonists specifically binding HARC, and their use, in the prevention and treatment of diseases associated with expression of HARC. Additionally, the invention provides for the use of antisense molecules to polynucleotides encoding HARC for the treatment of diseases associated with the expression of HARC. The invention also provides diagnostic assays which utilize the polynucleotide, or fragments of the complement thereof, and antibodies specifically binding HARC.

US PAT NO: 5,759,536 [IMAGE AVAILABLE] L2: 18 of 28

DATE ISSUED: Jun. 2, 1998

TITLE: Use of fas ligand to suppress T-lymphocyte-mediated

immune responses

INVENTOR: Donald Beligian, Denver, CO

SIGNEE: Richard C. Duke, Denver, CO

ASSIGNEE: University Technology Corporation, Boulder, CO (U.S. corp.)

APPL. NO: 08/378,507

DATE FILED: Jan. 28, 1995

ART-UNIT: 189

PRIM-EXMR: Bruce R. Campbell

LEGAL-REP: Sheridan & Ross, P.C.

US PAT NO: 5,759,536 [IMAGE AVAILABLE] L2: 18 of 28

ABSTRACT:

A method for inhibiting T-lymphocyte-mediated immune responses, including those directed against autologous and/or heterologous tissues, e.g., by a recipient mammal of a transplanted tissue, said method comprising providing the recipient mammal with Fas ligand. The Fas ligand may be provided to the recipient mammal by a variety of means, including by pump implantation or by transplantation of transgenic tissue expressing Fas ligand. Also provided is a method for diagnostic use of Fas ligand expression in improving transplantation success.

US PAT NO: 5,756,086 [IMAGE AVAILABLE] L2: 19 of 28

DATE ISSUED: May 26, 1998

TITLE: Adenoviruses having modified fiber proteins

INVENTOR: Alan McClelland, Gaithersburg, MD

SIGNEE: Susan C. Stevenson, Frederick, MD

ASSIGNEE: Genetic Therapy, Inc., Gaithersburg, MD (U.S. corp.)

APPL. NO: 08/591,482

DATE FILED: Feb. 6, 1996

ART-UNIT: 185

PRIM-EXMR: Johnny F. Railey, II

LEGAL-REP: Elliot M. Olstein, Raymond J. Lillie

US PAT NO: 5,756,086 [IMAGE AVAILABLE] L2: 19 of 28

ABSTRACT:

An adenovirus wherein the adenovirus fiber protein includes a ligand which is specific for a receptor located on a desired cell type. The adenovirus may have at least a portion of the adenovirus fiber protein removed and replaced with a ligand which is specific for a receptor located on a desired cell type, or the adenovirus may include a fusion protein of the adenovirus fiber protein and the ligand. Such an adenovirus may also include a gene(s) encoding a therapeutic agent(s) and may be "targeted" in order to deliver such gene(s) to a desired cell type.

US PAT NO: 5,753,446 [IMAGE AVAILABLE] L2: 20 of 28

DATE ISSUED: May 19, 1998

TITLE: Mitogen ERK kinase kinase (MEKK) assay

INVENTOR: Gary L. Johnson, Boulder, CO

ASSIGNEE: National Jewish Center for Immunology & Respiratory

Medicine, Denver, CO (U.S. corp.)

APPL. NO: 08/472,934

DATE FILED: Jun. 6, 1995

ART-UNIT: 182

PRIM-EXMR: Stephen Walsh

ASST-EXMR: Kenneth A. Sorensen

LEGAL-REP: Giulio A. DeConti, Jr., Catherine J. Kara

US PAT NO: 5,753,446 [IMAGE AVAILABLE] L2: 20 of 28

ABSTRACT:

The present invention relates to isolated MEKK proteins, nucleic acid molecules having sequences that encode such proteins, and antibodies raised against such proteins. The present invention also includes methods useful for identifying compounds capable of specifically regulating signal transduction in cells expressing MEKK protein.

US PAT NO: 5,750,653 [IMAGE AVAILABLE] L2: 21 of 28

DATE ISSUED: May 12, 1998

TITLE: Protein, FAF1, which potentiates Fas-mediated apoptosis

and uses thereof

INVENTOR: Keting Chiu, Burlingame, CA

SIGNEE: Lewis T. Williams, Tiburon, CA

ASSIGNEE: The Regents of the University of California, Oakland, CA (U.S. corp.)

APPL. NO: 08/477,476

DATE FILED: Jun. 7, 1995

ART-UNIT: 182

PRIM-EXMR: Stephen Walsh

ASST-EXMR: Daryl A. Basham

LEGAL-REP: Townsend and Townsend and Crew LLP

US PAT NO: 5,750,653 [IMAGE AVAILABLE] L2: 21 of 28

ABSTRACT:

The present invention identifies a novel, Fas-associated factor 1 termed FAF1 which potentiates Fas-induced cell killing. The invention provides FAF1 nucleic acid and polypeptide compositions as well as methods of using these compositions in the therapeutic treatment of diseases resulting from dysregulation in apoptosis. Also provided are cells carrying and expressing the nucleic acid compositions and methods of using these cells to screen for agonists and antagonists of Fas-mediated apoptosis. Methods of isolating FAF1-interacting proteins are disclosed.

US PAT NO: 5,747,245 [IMAGE AVAILABLE] L2: 22 of 28

DATE ISSUED: May 5, 1998

TITLE: Nucleic acids encoding Fas associated proteins and screening assays using same

INVENTOR: John C. Reed, Carlsbad, CA

SIGNEE: Takaaki Sato, San Diego, CA

ASSIGNEE: La Jolla Cancer Research Foundation, La Jolla, CA (U.S. corp.)

APPL. NO: 08/259,514

DATE FILED: Jun. 14, 1994

ART-UNIT: 187

PRIM-EXMR: Stephanie W. Zlotner

ASST-EXMR: Dianne Rees

US PAT NO: 5,747,245 [IMAGE AVAILABLE] L2: 22 of 28

ABSTRACT:

The present invention provides mammalian protein tyrosine phosphatases, human PTP-BAS type 4, human PTP-BAS type 5a and mouse PTP-BAS type 5b,

each of which is a Fas-associated protein (FAP), nucleic acid molecules encoding a PTP-BAS type 4 or a PTP-BAS type 5 and antibodies specific for PTP-BAS type 4 or for a PTP-BAS type 5. The invention also provides methods for identifying FAP's, which can associate with Fas and can modulate apoptosis. The invention also provides screening assays for identifying an agent that can effectively alter the association of a FAP with Fas and, therefore, can increase or decrease the level of apoptosis in a cell. The invention further provides methods of modulating apoptosis in a cell by introducing into the cell a nucleic acid molecule encoding a PTP-BAS or an antisense nucleotide sequence, which is complementary to a portion of a nucleic acid molecule encoding a PTP-BAS. The invention also

provides a method of using a reagent that can specifically bind to a FAP to diagnose a pathology that is characterized by an increased or decreased level of apoptosis in a cell. The invention also provides methods of modulating apoptosis in a cell by contacting the cell with an agent that effectively alters the association of a FAP and Fas in a cell or alters the activity of a FAP in a cell.

US PAT NO: 5,712,262 [IMAGE AVAILABLE] L2: 23 of 28

DATE ISSUED: Jan. 27, 1998

TITLE: Use of sphingosine-1-phosphate to suppress programmed cell death

INVENTOR: Sarah Spiegel, 6343 Linway Ter., McLean, VA 22101

APPL. NO: 08/754,323

DATE FILED: Nov. 21, 1996

ART-UNIT: 125

PRIM-EXMR: Phyllis G. Sprack

LEGAL-REP: Glenna Hendricks, Carol Carr

US PAT NO: 5,712,262 [IMAGE AVAILABLE] L2: 23 of 28

ABSTRACT:

Administration of sphingosine-1-phosphate to retard apoptosis in degenerative diseases as neurodegenerative disease, ischemic stroke and aging is disclosed wherein slowing of the process of programmed cell death is useful as a means to slow the degenerative process in patients suffering from these diseases.

US PAT NO: 5,712,115 [IMAGE AVAILABLE] L2: 24 of 28

DATE ISSUED: Jan. 27, 1998

TITLE: Human cell death-associated protein

INVENTOR: Phillip R. Hawkins, Mountain View, CA

SIGNEE: Scott Michael Braxton, San Mateo, CA

ASSIGNEE: Lynx E. Murry, Portola Valley, CA

APPL. NO: 08/618,164

DATE FILED: Mar. 19, 1996

ART-UNIT: 186

PRIM-EXMR: Christina Y. Chan

ASST-EXMR: Emma Cech

LEGAL-REP: Lucy J. Billings, Barbara J. Luther

US PAT NO: 5,712,115 [IMAGE AVAILABLE] L2: 24 of 28

ABSTRACT:

The present invention provides a polynucleotide which identifies and encodes a human cell death-associated protein (cdap) which was isolated from a thrombolytic synovial library. The invention provides for genetically engineered expression vectors and host cells comprising a nucleic acid sequence encoding CDAP. The invention also provides for the therapeutic use of purified CDAP, cdap or its antisense molecules, or CDAP inhibitors in pharmaceutical compositions and for treatment of conditions or diseases associated with expression of CDAP. The invention also describes diagnostic assays which utilize diagnostic compositions comprising the polynucleotide, or fragments thereof, or antibodies which specifically bind to the polypeptide.

US PAT NO: 5,683,070 [IMAGE AVAILABLE] L2: 25 of 28

DATE ISSUED: Sep. 2, 1997

TITLE: Recombinant production of a soluble splice variant of the Fas (Apo-1) antigen, Fas TM

INVENTOR: Philip J. Barr, Berkeley, CA

SIGNEE: John P. Shapiro, Albany, CA

ASSIGNEE: Michael C. Kiefer, Clayton, CA

APPL. NO: 08/152,443

DATE FILED: Nov. 15, 1993

ART-UNIT: 182

PRIM-EXMR: David L. Fitzgerald

LEGAL-REP: Morrison & Foerster

US PAT NO: 5,683,070 [IMAGE AVAILABLE] L2: 25 of 28

ABSTRACT:

The invention provides soluble forms of the Fas (Apo-1) protein

comprising both the intracellular and extracellular domains of the full-length polypeptide. Exemplified is a naturally-occurring splice variant of the Fas gene, Fas.DELTA.TM, which lacks the transmembrane domain of the native antigen. DNA encoding the protein, cells expressing the recombinant DNA, and methods of using the protein and DNA are also provided.

US PAT NO: 5,652,210 [IMAGE AVAILABLE] L2: 26 of 28  
DATE ISSUED: Jul. 29, 1997  
TITLE: Soluble splice variant of the Fas (APO-1) antigen,  
Fas.DELTA.TM  
INVENTOR: Philip J. Barr, Berkeley, CA  
John P. Shapiro, Albany, CA  
Michael C. Kleer, Clayton, CA  
ASSIGNEE: LXR Biotechnology, Inc., Richmond, CA (U.S. corp.)  
APPL NO: 08/444,231  
DATE FILED: May 18, 1995  
ART UNIT: 182  
PRIM-EXMR: David L. Fitzgerald  
LEGAL-REP: Morrison & Foerster

US PAT NO: 5,652,210 [IMAGE AVAILABLE] L2: 26 of 28  
ABSTRACT:  
The invention provides soluble forms of the Fas (Apo-1) protein comprising both the intracellular and extracellular domains of the full-length polypeptide. Exemplified is a naturally-occurring splice variant of the Fas gene, Fas.DELTA.TM, which lacks the transmembrane domain of the native antigen. DNA encoding the protein, cells expressing the recombinant DNA, and methods of using the protein and DNA are also provided.

US PAT NO: 5,632,994 [IMAGE AVAILABLE] L2: 27 of 28  
DATE ISSUED: May 27, 1997  
TITLE: Fas associated proteins  
INVENTOR: John C. Reed, Carlsbad, CA  
Takaaki Sato, San Diego, CA  
ASSIGNEE: La Jolla Cancer Research Foundation, La Jolla, CA (U.S. corp.)  
APPL NO: 08/410,804  
DATE FILED: Mar. 27, 1995  
ART UNIT: 187  
PRIM-EXMR: Stephanie W. Zitomer  
ASST-EXMR: Dianne Rees  
LEGAL-REP: Campbell and Flores  
US PAT NO: 5,632,994 [IMAGE AVAILABLE] L2: 27 of 28

ABSTRACT:  
The present invention provides mammalian protein tyrosine phosphatases, human PTP-BAS type 4, human PTP-BAS type 5a and mouse PTP-BAS type 5b, each of which is a Fas-associated protein (FAP), nucleic acid molecules encoding a PTP-BAS type 4 or a PTP-BAS type 5 and antibodies specific for a PTP-BAS type 4 or for a PTP-BAS type 5. The invention also provides methods for identifying FAP's, which can associate with Fas and can modulate apoptosis. The invention also provides screening assays for identifying an agent that can effectively alter the association of a FAP with Fas and, therefore, can increase or decrease the level of apoptosis in a cell. The invention further provides methods of modulating apoptosis in a cell by introducing into the cell a nucleic acid molecule encoding a PTP-BAS or fragment of a PTP-BAS or an antisense nucleotide sequence, which is complementary to a portion of a nucleic acid molecule encoding a PTP-BAS. The invention also provides a method of using a reagent that can specifically bind to a FAP to diagnose a pathology that is characterized by an increased or decreased level of apoptosis in a cell. The invention also provides methods of modulating apoptosis in a cell by contacting the cell with an agent that effectively alters the association of a FAP and Fas in a cell or alters the activity of a FAP in a cell.

US PAT NO: 5,620,889 [IMAGE AVAILABLE] L2: 28 of 28  
DATE ISSUED: Apr. 15, 1997  
TITLE: Human anti-Fas IgG1 monoclonal antibodies  
INVENTOR: David H. Lynch, Bainbridge Island, WA

Mark R. Alderson, Bainbridge Island, WA  
ASSIGNEE: Immunex Corporation, Seattle, WA (U.S. corp.)  
APPL NO: 08/322,805  
DATE FILED: Oct. 13, 1994  
ART UNIT: 186  
PRIM-EXMR: Susan A. Loring

US PAT NO: 5,620,889 [IMAGE AVAILABLE] L2: 28 of 28  
ABSTRACT:  
The present invention provides a panel of monoclonal antibodies and binding proteins which specifically bind to human Fas antigen. Some of the antibodies and binding proteins are capable of stimulating T cell proliferation, inhibiting binding of anti-Fas CH-11 monoclonal antibody to cells expressing Fas antigen, blocking anti-Fas CH-11 monoclonal antibody-mediated lysis of cells, and blocking Fas ligand-mediated lysis of cells. The invention also provides for therapeutic compositions comprising the monoclonal antibodies.

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(FILE USPAT ENTERED AT 15:02:01 ON 25 MAR 1989)  
E GOODWIN, RAYMOND/JN

L1 23 S ET OR E3 OR E4  
L2 28 S FAS(W) LIGAND  
L3 1 S L1 AND L2

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U.S. Patent & Trademark Office LOGOFF AT 15:23:04 ON 25 MAR 1989